OIPE

RAW SEQUENCE LISTING

DATE: 05/14/2001

PATENT APPLICATION: US/09/847,670

Input Set : A:\26862631.app

Output Set: N:\CRF3\05142001\I847670.raw

TIME: 12:42:47

ENTERED

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3 <110> APPLICANT: PHARMACIA & UPJOHN COMPANY
      5 <120> TITLE OF INVENTION: HEPATITUS C VIRUS HELICASE CRYSTALS, CRYSTALLOGRAPHIC
             STRUCTURE AND METHODS
      8 <130> FILE REFERENCE: 6263.N
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/847,670
     11 <141> CURRENT FILING DATE: 2001-05-02
     13 <150> PRIOR APPLICATION NUMBER: 60/201,598
     14 <151> PRIOR FILING DATE: 2000-05-03
     16 <160> NUMBER OF SEQ ID NOS: 3
    18 <170> SOFTWARE: PatentIn Ver. 2.1
    20 <210> SEQ ID NO: 1
    21 <211> LENGTH: 473
    22 <212> TYPE: PRT
    23 <213> ORGANISM: Hepatitis C virus
    25 <400> SEQUENCE: 1
    26 Met Val Asp Phe Ile Pro Val Glu Asn Leu Glu Thr Thr Met Arg Ser
    29 Pro Val Phe Thr Asp Asn Ser Ser Pro Pro Val Val Pro Gln Ser Phe
                    20
                                         25
    32 Gln Val Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys
                35
    35 Val Pro Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn
                                 55
    38 Pro Ser Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala
                            70
                                                 75
    41 His Gly Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr
                                             90
    44 Gly Ser Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly
                                        105
    47 Gly Cys Ser Gly Gly Ala Tyr Asp Ile Ile Ile Cys Asp Glu Cys His
                                   120
    50 Ser Thr Asp Ala Thr Ser Ile Leu Gly Ile Gly Thr Val Leu Asp Gln
                               135
    53 Ala Glu Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro
                           150
                                               155
    56 Pro Gly Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val Ala Leu
                       165
                                           170
    59 Ser Thr Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Leu Glu
                   180
                                       185
    62 Val Ile Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys
              195
                                   200
                                                        205
    65 Cys Asp Glu Leu Ala Ala Lys Leu Val Ala Leu Gly Ile Asn Ala Val
                               215
                                                    220
    68 Ala Tyr Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp
                           230
                                               235
    71 Val Val Val Val Ala Thr Asp Ala Leu Met Thr Gly Tyr Thr Gly Asp
```

250

RAW SEQUENCE LISTING DATE: 05/14/2001 PATENT APPLICATION: US/09/847,670 TIME: 12:42:47

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```
74 Phe Asp Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp
                   260
                                      265
     77 Phe Ser Leu Asp Pro Thr Phe Thr Ile Glu Thr Ile Thr Leu Pro Gln
     78 275
                                  280
                                                      285
     80 Asp Ala Val Ser Arg Thr Gln Arg Arg Gly Arg Thr Gly Arg Gly Lys
     81 290
                             295
                                                  300
     83 Pro Gly Ile Tyr Arg Phe Val Ala Pro Gly Glu Arg Pro Ser Gly Met
                          310
                                             315
     86 Phe Asp Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp
                    325
                                         330
     89 Tyr Glu Leu Thr Pro Ala Glu Thr Thr Val Arg Leu Arg Ala Tyr Met
     90 340
                                     345
     92 Asn Thr Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu
                                 360
     95 Gly Val Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln
                             375
                                                 380
     98 Thr Lys Gln Ser Gly Glu Asn Leu Pro Tyr Leu Val Ala Tyr Gln Ala
                         390
                                   <sub>.</sub> 395
     101 Thr Val Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser Trp Asp Gln Met
                      405
                                         410
                                                             415
     104 Trp Lys Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro Thr Pro
                  420
                                      425
                                                          430
     107 Leu Leu Tyr Arg Leu Gly Ala Val Gln Asn Glu Ile Thr Leu Thr His
    108 435
                                   440
     110 Pro Val Thr Lys Tyr Ile Met Thr Cys Met Ser Ala Asp Leu Glu Val
     111 450
                               455
     113 Val Thr Ser His His His His His
    114 465
    117 <210> SEQ ID NO: 2
    118 <211> LENGTH: 9
    119 <212> TYPE: PRT
    120 <213> ORGANISM: Hepatitis C virus
    122 <400> SEQUENCE: 2
    123 Pro Thr Gly Ser Gly Lys Ser Thr Lys
    124 1
    127 <210> SEQ ID NO: 3
    128 <211> LENGTH: 8
    129 <212> TYPE: PRT
    130 <213> ORGANISM: Artificial Sequence
    132 <220> FEATURE:
    133 <223> OTHER INFORMATION: Description of Artificial Sequence: conserved
            sequence motif VI wherein Xaa represents
             unconserved amino acids within the motif
    137 <400> SEQUENCE: 3
W--> 138 Gln Arg Xaa Gly Arg Xaa Gly Arg
    139 1
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VERIFICATION SUMMARY DATE: 05/14/2001 PATENT APPLICATION: US/09/847,670 TIME: 12:42:48

Input Set : A:\26862631.app

Output Set: N:\CRF3\05142001\1847670.raw

 $\texttt{L:} 10 \ \texttt{M:} 270 \ \texttt{C:} \ \texttt{Current Application Number differs, Replaced Current Application Number } \\$

L:138 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3 L:138 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3

L:138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3